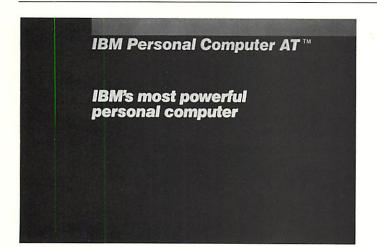
IBM Personal Computer AT



IBM Personal Computer AT™
IBM's most powerful personal computer

Module I: System overview

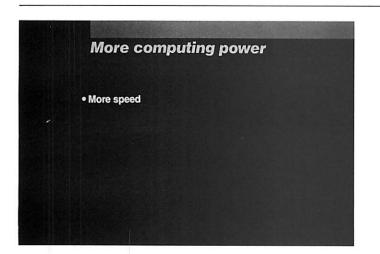


Slide 1:

More computing power

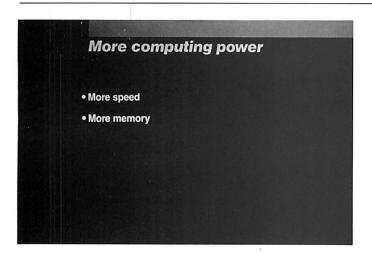
Welcome. Today, we will examine the capabilities and application potential of a new personal computer—the IBM Personal Computer AT. This is the most powerful personal computer offered by IBM. It works faster and stores more data and larger programs than any previous IBM Personal Computer.

Let's briefly summarize the IBM Personal Computer AT's capabilities at this point and some of the benefits you can expect from its extra power. Then we'll look at the system and its uses in more detail.



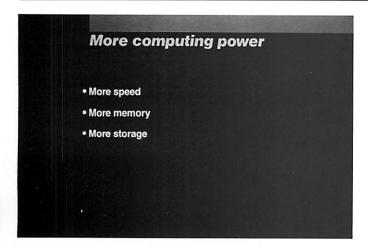
Slide 2: More speed

The IBM Personal Computer AT processes information two to three times faster than previous IBM Personal Computers. It is built around Intel's 80286 microprocessor. This is a 16/24-bit microchip that can handle more memory and move data at higher speed.



Slide 3: More memory

With the IBM Personal Computer AT, you can have up to 3 megabytes—or 3 million characters—of user memory (RAM). That's equivalent to about 1,500 typed, double-spaced, 8½ x 11-inch pages.



Slide 4: More storage

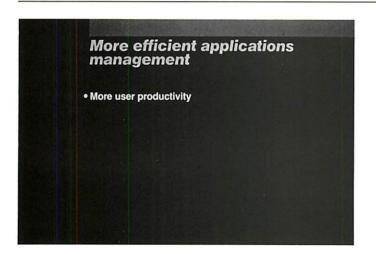
The IBM Personal Computer AT also can provide you with more storage capacity. You can install up to 41.2 megabytes of disk storage–21,000 pages–using a diskette and two fixed disks.



Slide 5:

More efficient applications management

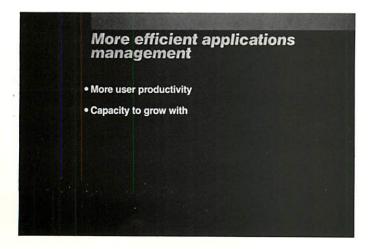
The IBM Personal Computer AT's extensive storage allows you to handle larger applications without splitting a program into small segments. As a result, you can handle those applications more easily and more productively.



Slide 6:

More user productivity

Since the IBM Personal Computer AT can process complex applications faster than previous systems, it can reduce the time it takes to complete a job. It can help you work more productively.

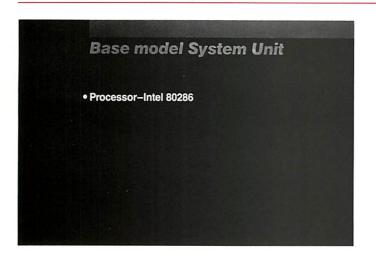


Slide 7:

Capacity to grow with

The IBM Personal Computer AT can provide you with faster processing and more memory and storage. And expansion is easy when your growing information needs demand more capacity.

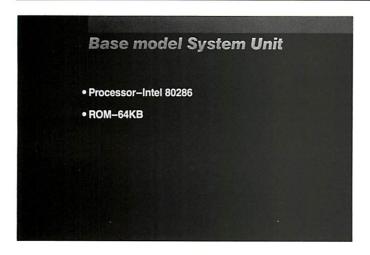
Module II: Hardware



Slide 1:

Base model System Unit Processor—Intel 80286

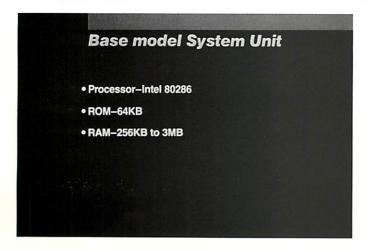
The IBM Personal Computer AT's power begins in the System Unit, which comes with the Intel 80286 16/24-bit processor and 64KB of permanent memory (Read Only Memory).



Slide 2:

ROM-64KB

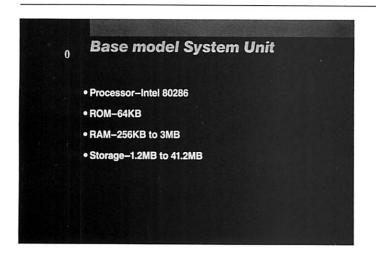
Read Only Memory includes an enhanced version of the BASIC programming language, support for a battery-operated clock/calendar, and an automatic Power-on Self-test of system components.



Slide 3:

RAM-256KB to 3MB

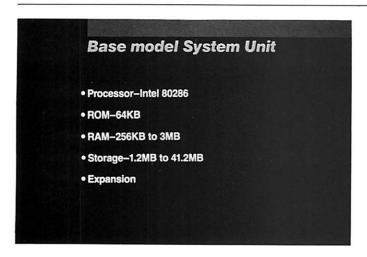
Standard user memory in the base model IBM Personal Computer AT is 256KB. This can be easily expanded to 3MB.



Slide 4:

Storage—1.2MB to 41.2MB

Standard data storage for the base model is provided by a single, slimline, 1.2MB double-sided diskette drive. Disk storage capacity can be expanded to provide up to 41.2MB—the equivalent of nearly 21,000 pages of typed information.



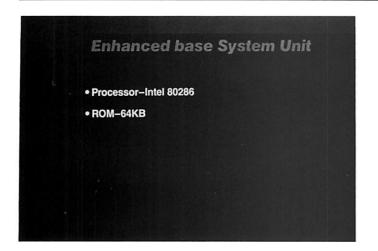
Slide 5: Expansion

Eight expansion slots are included in the System Unit. One is for a Fixed Disk Drive/Diskette Drive Adapter, leaving 7 for the addition of memory expansion cards, printer adapter, communications adapter and other optional features.



Slide 6: Enhanced base System Unit

There's a more ambitious way to begin with the IBM Personal Computer AT. You can select the enhanced model, which comes with more memory and storage capacity than the base model.



Slide 7:

Processor—Intel 80286 ROM—64KB

The processor is the same Intel 80286 used in the base model. And ROM is the same—64KB standard.



Slide 8:

RAM-512KB to 3MB

But standard user memory in the enhanced model is 512KB—and this can be expanded to 3MB.



Slide 9:

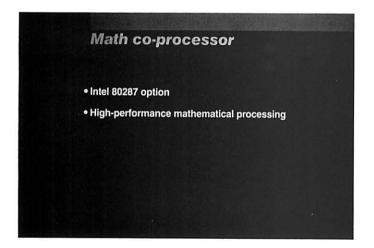
Storage-21.2MB to 41.2MB

Standard disk storage in the enhanced model is much larger than that in the base model. Whereas the base model offers 1.2MB—or approximately 600 pages—of data storage, the enhanced model offers 21.2MB—nearly 11,000 pages. This extra storage is provided by a 1.2MB diskette drive plus a 20MB fixed disk drive. And you can increase that amount by adding a second 1.2MB diskette drive or a 360KB diskette drive or a second fixed disk drive that boosts your total disk storage capacity to 41.2MB.

Enhanced base System Unit Processor-Intel 80286 ROM-64KB RAM-512KB to 3MB Storage-21.2MB to 41.2MB Serial/Parallel Adapter

Slide 10: Serial/Parallel Adapter

The enhanced model includes a Serial/ Parallel Adapter card—as well as a Fixed Disk Drive/Diskette Drive Adapter. That leaves 6 slots for other uses.



Slide 11: Math co-processor

An optional math co-processor—the Intel 80287—offers the capability to perform high-speed mathematical calculations.

So, you can perform your "number-crunching" applications—for large math problems, large-scale design calculations, extensive financial analyses—faster than ever before.



Slide 12: Expandable memory

To take full advantage of faster processing, you'll want more memory. With the IBM Personal Computer AT, you match the size of memory to your needs.

Expandable memory • Standard-256KB or 512KB

Slide 13: Standard-256KB or 512KB

The 256KB standard RAM on the base model can be doubled to 512KB just by plugging additional memory modules into sockets in the System Unit.

Expandable memory • Standard-256KB or 512KB • Expansion-512KB to 640KB

Slide 14:

Expansion-512KB to 640KB

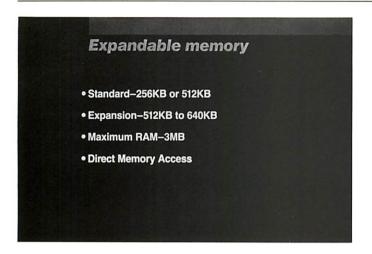
In addition, both the base model and the enhanced model can be expanded from 512KB to 640KB by adding a 128KB Memory Expansion Option card. This card plugs into an expansion slot in the System Unit.

Expandable memory Standard-256KB or 512KB Expansion-512KB to 640KB Maximum RAM-3MB

Slide 15:

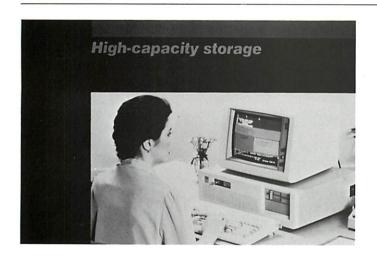
Maximum RAM-3MB

If you need more than 640KB, you can add 512KB Memory Expansion Options to obtain up to 3MB of user memory.



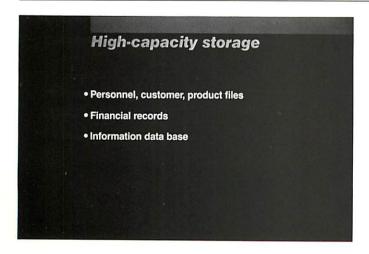
Slide 16: Direct Memory Access

To facilitate reading, writing and transfer of information in memory, the System Unit includes 7 Direct Memory Access Channels that move blocks of information at very high speeds.



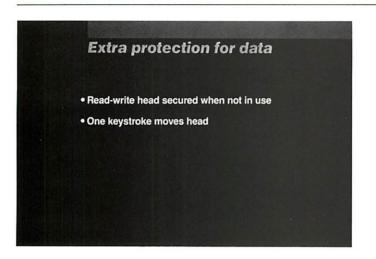
Slide 17: High-capacity storage

The IBM Personal Computer AT sets high standards for diskette and disk storage.



Slide 18: High-capacity storage

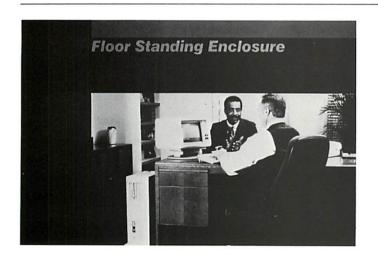
The combination of large-capacity diskette and fixed disk drives can give you quick access to large personnel, customer or product files...extensive financial records...and other sophisticated data bases of information.



Slide 19:

Extra protection for data

When you use a fixed disk for storage, your data will be protected from damage by a new feature on the 20MB fixed disk drive. When not in use, the read-write head can be placed in a special location on the disk. It takes only one typed command to move the head. This keeps the head away from the data if the computer is moved and thus prevents accidental damage to your data.



Slide 20:

Floor Standing Enclosure

All the hardware we've discussed so far is built into the System Unit of the IBM Personal Computer AT. And, now, the System Unit can be easily removed from your work space when mounted in this new Floor Standing Enclosure. So only the keyboard and display need to be on your desk or worktable.



Slide 21:

Enhanced keyboard design

The 84-key IBM Personal Computer AT Keyboard contains many of the same design features as the familiar, easy-to-use IBM PC Keyboard: adjustable typing angle; standard typewriter layout; 10-key calculator keypad; 10 function keys for activating frequently used commands quickly; and a special "print screen" key for printing out anything that appears on your display screen. There's a 10-foot coiled cable that connects the keyboard to the System Unit, so you can use the keyboard in a way that's most convenient for you.

In addition, several keyboard design enhancements have been added.

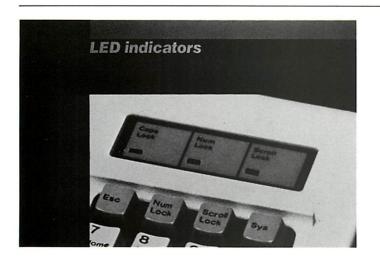


Slide 22:

New enter/shift keys

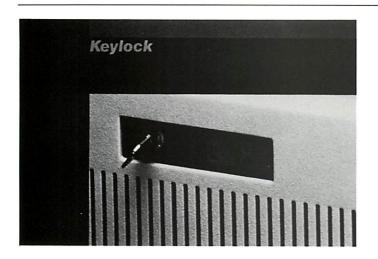
The "enter" key, one of the most frequently used keys on the keyboard, has been enlarged and clearly labeled.

The "shift" keys, used for uppercase letters and special characters, have also been enlarged.



Slide 23: LED indicators

Labeled green LED indicators on the upper right-hand side of the keyboard light up when you are in the "Number Lock," "Scroll Lock" or "Caps Lock" modes.



Slide 24: Keylock

A special keylock on the System Unit can be used to prevent operation of the keyboard even if the system is turned on. You may use this feature to provide added security for sensitive information by restricting use of the IBM Personal Computer AT to authorized users.



Slide 25:

IBM Monochrome Display

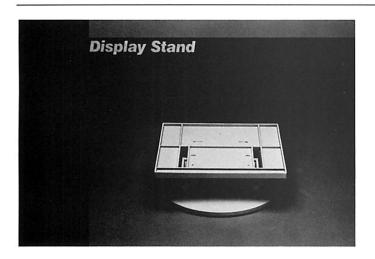
The IBM Monochrome Display—shown here—can be used for graphics, text and numerical information. Its 11½-inch antiglare screen displays up to 25 lines of information—with up to 80 characters in each line. That's equivalent to an 8½ by 11-inch double-spaced page of typed information.

To use this display, you will need an IBM Monochrome Display and Printer Adapter that plugs into one of the System Unit's expansion slots.



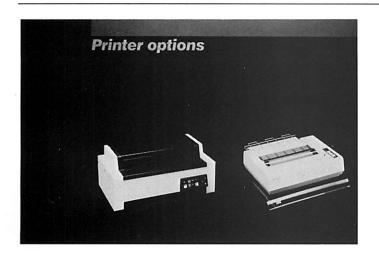
Slide 26: IBM Color Display

A second display option is the IBM Color Display. This is a high-quality monitor that can show both text and graphic displays in a choice of 16 colors for text—or 8 colors for graphics—on a 12½-inch screen. This display requires an IBM Color/Graphics Monitor Adapter in one of the expansion slots.



Slide 27: Display Stand

Either display can be placed on an optional IBM Display Stand that swivels and tilts for better viewing. You can move the stand wherever you feel most comfortable working with it.



Slide 28: Printer options

To produce copy printed on paper, two high-quality IBM printers are available for the IBM Personal Computer AT.

Graphics Printer • 80 characters per second • 3 character sets • 18 print styles • 4 print sizes

Slide 29:

Graphics Printer

The IBM Graphics Printer is a dot-matrix printer that produces text or graphic material at speeds of up to 80 characters per second—60 lines a minute. This printer offers you a choice of 3 character sets, 18 print styles and 4 print sizes, so you can tailor the appearance of a document to your own specifications.

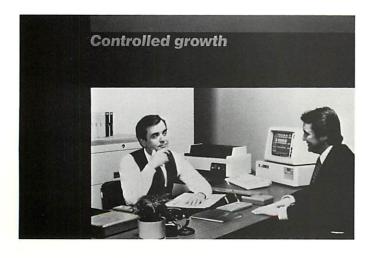
To use this printer, you will need either the IBM Monochrome Display and Printer Adapter or the IBM Serial/Parallel Adapter.



Slide 30:

Color Printer

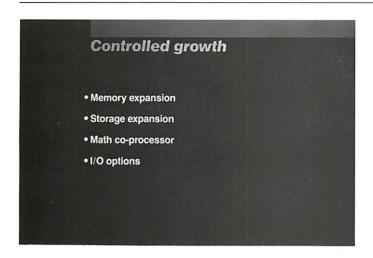
A second option is the IBM Personal Computer Color Printer. This is an 8-color dot-matrix printer that can produce text, charts, graphs or artwork at 4 print speeds ranging from 35 to 200 characters per second. The same type of adapter used for the Graphics Printer can be used for this color printer.



Slide 31:

Controlled growth

Now, let's quickly review the highlights of IBM Personal Computer AT hardware. The important thing to remember is that this is a powerful personal computer that can grow in size, capabilities and data storage capacity as your computing needs become more demanding.



Slide 32:

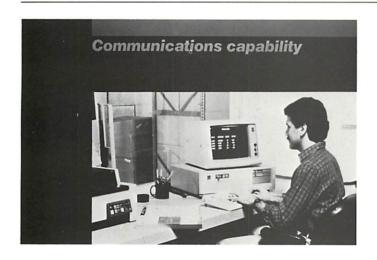
Controlled growth

You can start with as little as 256KB of user memory and expand to 3 megabytes to handle large applications and integrated programs.

You can start with a single 1.2 megabyte diskette—or two of them. You can increase storage capacity with one or two 20MB fixed disks.

You can use the optional math co-processor to speed numerical calculation.

You have a choice of displays and printers that can be connected with adapters in the system expansion slots.



Slide 33:

Communications capability

You also can add communications capability to the IBM Personal Computer AT with an adapter, a communications modem, and appropriate software. Information can be exchanged over standard telephone lines with other IBM computers or with subscription information services provided by suppliers, such as THE SOURCE. Subscription information services offer you access to data banks of stock reports, weather information, airline reservation systems, and a variety of business and educational information.

*THE SOURCE is a service mark of Source Telecomputing Corporation, a subsidiary of The Reader's Digest Association, Incorporated.

Module III: Programming

Advanced DOS program DOS 3.00: Support for 1.2MB Diskette Drive and 20MB Fixed Disk Drive Copy DOS to diskette or disk Requires 128KB of user memory

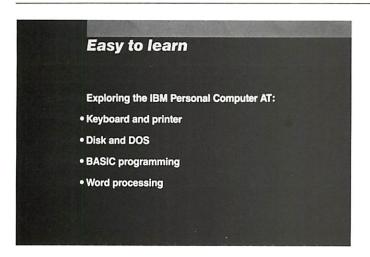
Slide 1:

Advanced DOS program

The new Disk Operating System 3.00 is needed to take advantage of the advanced capabilities of the IBM Personal Computer AT.

You can copy DOS 3.00 to a diskette or fixed disk. It works with single- or double-sided diskettes formatted for 160/180KB or 320/360KB and is required for the new 1.2MB diskettes and the 20MB fixed disk.

DOS 3.00 will operate on any IBM Personal Computer with 128KB of user memory.



Slide 2: Easy to learn

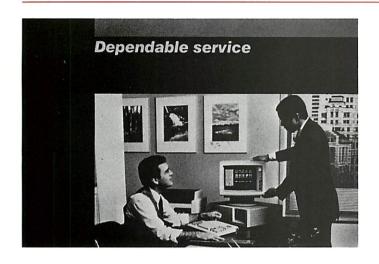
With so much that's new on this system, you'll appreciate the introductory program called Exploring the IBM Personal Computer AT. This program guides a first-time user a step at a time through operation of the keyboard, printer and disk storage. It introduces DOS 3.00 and offers the user some instructions in BASIC programming. It also contains an exercise in simple word processing that will familiarize a user with basic principles of word processing.



Slide 3: Highly compatible programming

With the IBM Personal Computer AT, you have a wide choice of IBM Personal Computer programs ready for use. There are IBM word-processing programs that can help you write letters, reports, memos, professional articles—in fact, any type of written communication. There are spreadsheet programs to use for "what-if" types of problems. There is a variety of accounting programs—such as general ledger, accounts receivable, accounts payable, payroll, and more—for business operations of any size.

Module IV: Service



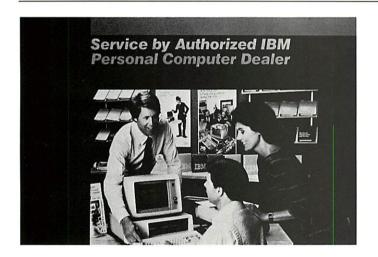
Slide 1:

Dependable service

In whatever way you use your IBM Personal Computer AT, you can be confident that IBM's commitment to excellence in design and service assures you of years of dependable service.

If your system ever should require service, you'll be glad to know that there's an IBM trained technician just a phone call away.

IBM provides a 1-year Limited Warranty on the system at no charge. Beyond that, there are extended service options available at reasonable cost.

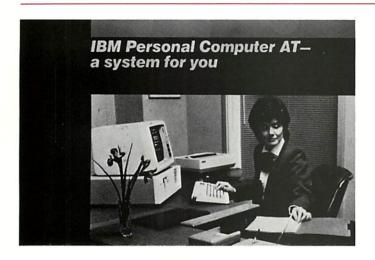


Slide 2:

Service by Authorized IBM Personal Computer Dealer

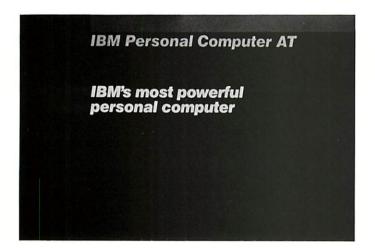
Service on your IBM Personal Computer AT is provided by an Authorized IBM Personal Computer Dealer. If you move to a different location, another authorized dealer will assume service responsibility. Authorized dealers are qualified to give you prompt, expert service.

Module V: Close



Slide 1: IBM Personal Computer AT a system for you

To summarize, the IBM Personal Computer AT offers you more speed and storage capacity to handle large applications productively. And you can easily expand its capability as your needs grow.



Slide 2:

IBM Personal Computer AT IBM's most powerful personal computer